

REMARKS

Specification

The Examiner objected to the specification because the serial numbers of several applications identified in the specification were missing. The amendments to the specification set forth above correct that issue.

Special Circumstances

In the Office action mailed December 23, 2003, the Examiner asked applicant to point out any material information from the co-pending applications listed as parents to the instant application if the criteria for materiality applies and if the examination record provides reason for applicant to believe that the Examiner has not considered such information. Applicant is uncertain what the Examiner is requesting. Applicant has previously identified the applications and believes that identification satisfies its duty of disclosure. Nevertheless, in an attempt to respond to the request, applicant has attached to the end of this document as "Attachment 1" a list of its patent applications and its one Taiwanese patent (the list does not include the national phase filings of the listed PCT application). None of the listed applications have yet issued as patents. Many if not all of the listed applications incorporate this application by reference. The Examiner is requested to inform applicant if further information concerning any of these applications is needed.

Double Patenting

The Examiner provisionally rejected claims 1-4, 7 and 9 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of co-pending Application No. 10/052,274, claims 1-29 of co-pending

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Application No. 09/929,238, claims 1-15 of co-pending Application No. 10/052,273, claims 1-20 of co-pending Application No. 10/050,085, and claims 1-10 of co-pending Application No. 10/100,211. The Examiner provisionally rejected claims 1-4 and 7 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of co-pending Application No. 09/955,418 and claims 1-18 of co-pending Application No. 10/052,806. Applicant traverses these rejections.

Applicant understands that these rejections may be withdrawn when they are the only rejections remaining in this application in order to allow the application to proceed to issuance. (See MPEP §804.) Additionally, a number of the cited claims of the co-pending applications have been or will be amended or cancelled without prejudice, and as a result, one or more of the double patenting rejections may now be or may become moot. In light of these facts, applicant requests that the discussion of the obviousness-type double patenting rejections be postponed pending resolution of the remaining issues discussed herein. If the remaining issues are resolved, then applicant requests that the double patenting rejections be withdrawn so that the application may proceed to issuance.

Statement Under 37 CFR 1.78(c)

The Examiner required applicant under 35 USC §103(c) and 37 CFR 1.78(c) to state whether the inventions claimed in the applications cited as the bases for the double patenting rejections were commonly owned at the time the invention claimed in the present application was made. In response, SD3, LLC states that the inventions claimed in the present application and in the co-pending applications cited by the Examiner were commonly owned or subject to an obligation of assignment to SD3, LLC

at the time each later invention was made. The undersigned is authorized to make this statement on behalf of SD3, LLC. By making this statement applicant does not concede that the cited claims are conflicting claims or that the double patenting rejections are proper.

Claim Rejections – 35 USC §102(f)

The Examiner rejected claims 1-4, 7 and 9 under 35 U.S.C. §102(f) by saying applicant did not invent the claimed subject matter. Specifically, the Examiner said, "It is not clear who actually invented the subject matter of claims 1 and 3-9 because each of the above co-pending applications [referring to the co-pending applications cited to support the double patenting rejections] have different inventive entities." (Office Action, 7.) This rejection is traversed.

The inventors named in the present application are the Inventors of the subject matter claimed in the present application. Multiple individuals are named as inventors because each individual made a contribution to the subject matter of at least one claim of the application, even though each individual may not have made the same type or amount of contribution and even though each individual may not have made a contribution to the subject matter of every claim in the application. Different inventive entities are named in a number of the co-pending applications cited by the Examiner because other individuals made contributions to the subject matter of at least one claim of each such application. The fact that inventive entities may be different in various applications does not mean that inventorship is incorrect in the present application. Often applications with overlapping subject matter but with additional disclosures and differing sets of claims have different inventive entities. That is the situation here. The

present application and the co-pending applications cited by the Examiner have disclosures and claims that differ and that require the naming of different inventive entities. Thus, there is no inconsistency in inventorship and applicant requests the rejection under 35 U.S.C. 102(f) be withdrawn.

Claim Rejections – 35 USC §103

The Examiner rejected claims 1-4, 7 and 9 under 35 U.S.C. §103(a) as obvious in light of U.S. Patent No. 5,052,255 to Gaines in light of U.S. Patent No. 3,785,230 to Lokey and U.S. Patent No. 3,858,095 to Friemann et al. That rejection is traversed.

Claims 1-4 in the present application describe woodworking machines having "a cutting zone" and "a cutting tool ... adapted to move at least partially into the cutting zone to cut a workpiece." The machines described in those claims also include "a detection system adapted to detect contact between a person and the cutting tool," and "a reaction system adapted to stop motion of the cutting tool into the cutting zone upon detection of contact between a person and the cutting tool by the detection system." Claims 7-9 describe woodworking machines that have "a reaction system adapted to interrupt the translational movement of the cutter upon the detection of contact between the person and the cutter by the detection system." Nothing in the cited references teaches or suggests machines with those combinations of features.

The Examiner says those claims are obvious because Gaines discloses a system to stop the motion of a cutting tool into a cutting zone and Lokey and Friemann disclose systems to stop a cutting tool when proximity or contact between a user and the cutting tool is detected. However, Gaines does not show or suggest any system that can stop the movement of a cutting tool into a cutting zone, or interrupt the translational

movement of a cutter, *upon detection of contact* between the person and a cutting tool. Instead, Gaines shows mechanisms to stop the movement of a blade toward a user when the blade "moves faster than the predetermined safe speed." (Gaines, column 3, lines 59-60.) Those mechanisms include either a hydraulic cylinder with leaf springs that limit the flow of hydraulic fluid in the cylinder when the cylinder accelerates too fast (Gaines, column 4), or mechanical systems that include centrifugally driven locking members that move outward due to centrifugal force when the blade accelerates toward a user faster than expected (Gaines, column 5, lines 19-25, column 6, lines 8-10 and 50-56). Those mechanisms are all actuated by acceleration; none of those mechanisms could be actuated upon detection of contact between the blade and a person. Some other, undisclosed mechanism would be required to modify Gaines to include a reaction system as set forth in applicant's pending claims.

The fact that the cited references fail to teach or suggest a reaction system as set forth in applicant's claims means that the references by themselves cannot establish obviousness. The MPEP expressly says: "To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP §2143.03 (citations omitted).

Even if the cited references disclosed all of the limitations in the claims, the claims would still not be obvious because there is no teaching, suggestion or motivation in the prior art to combine Gaines with Lokey and/or Friemann. The MPEP explains: "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in

the knowledge generally available to one of ordinary skill in the art." MPEP §2143.03. In other words, the desirability of the combination must be suggested by the prior art or known by persons of ordinary skill in the art. If not, then the combination is improper. MPEP §2143.

In the case at hand, the Examiner says, "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the device of Gaines to order further stop motion of the cutting tool into the cutting zone when contact between the user and the tool is detected in order to prevent further and serious injury to the user." However, the simple desire to "prevent further and serious injury to the user" cannot by itself be sufficient motivation to combine the references because if it were, then almost no safety improvement could be patented since virtually all inventions are combinations of old elements. Clearly, that is not the rule. Rather, there must be some express or implicit teaching, suggestion or motivation in the prior art to make the specifically claimed combination. Expressed differently, it is not the *desire* to make something better but the *solution* that must be suggested or taught.

In the case at hand, that means there must be some express or implicit teaching or suggestion in the prior art to modify Gaines as set forth in applicant's claims. For example, concerning applicant's claim 1, there must be some teaching or suggestion to modify Gaines to include both a detection system adapted to detect contact and a reaction system adapted to stop the movement of the cutting tool into the cutting zone when contact is detected. Where in the prior art is there such a suggestion? Lokey fails to provide that suggestion because Lokey does not teach or suggest a detection system adapted to detect contact or a system to stop the movement of a cutting tool into a

cutting zone. Friemann also fails to make that suggestion because there is no reasonable expectation that the detection system disclosed in Friemann would work on saws as disclosed in Gaines. (MPEP 2143.02) The system in Friemann is for band saws and it includes electrically conductive rollers that contact the band blade as the blade moves around its guides. (Friemann, column 3, lines 7-13.) How would those rollers work in a saw with a rotating, circular blade instead of a band blade, and how would contact between the rollers and the blade be ensured? Additionally, Friemann's circuit is dependent on the capacitance of the band saw blade, which is very different from the capacitance of a circular blade mounted in a housing as shown in Gaines. Where is there a teaching or suggestion that the circuit disclosed in Friemann would work with a saw blade as disclosed in Gaines?

In fact, why would a person of ordinary skill in the art think to modify the saw disclosed in Gaines to detect contact instead of proximity? Would it not be more likely that a person of ordinary skill would try to detect proximity, as described in Lokey, rather than contact, as disclosed by Friemann, given that the blade in Gaines is a circular blade like the one in Lokey, not a band saw blade as in Friemann, and given that the saw disclosed in Gaines is very different than the saw disclosed in Friemann?

Moreover, even if Gaines could be modified to detect contact, how could Gaines stop the movement of the blade into the cutting zone upon detection of contact? As explained previously, the mechanisms disclosed in Gaines for stopping the movement of the blade toward a user only function when the blade moves toward a user faster than a predetermined safe speed. (Gaines, column 3, lines 59-60.) Those mechanisms

are actuated by acceleration - they could not be actuated upon detection of contact between the blade and a person.

It is only by looking with hindsight at applicant's disclosure that one finds a suggestion or teaching to modify Gaines as set forth in applicant's claims. More specifically, it is applicant's disclosure that teaches how to modify the saw disclosed in Gaines to detect contact between a person and a cutting tool and to stop the movement of the cutting tool into a cutting zone upon the detection of contact. Such a modification based on hindsight reconstruction, however, is improper. In fact, the law is "clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (citations omitted). A suggestion, teaching or motivation to combine or modify references "must be clear and particular." Id. (citation omitted). There is no clear and particular suggestion, teaching or motivation to modify Gaines in light of Lokey and Friemann to arrive at applicant's pending claims, and therefore, the conclusion of obviousness is improper and should be withdrawn.

Withdrawn Claims 5, 6 & 8

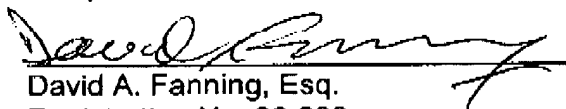
Applicant requests that withdrawn claims 5 and 6 be reinstated if claim 1 is allowed because they depend from claim 1. Applicant also requests that claim 8 be reinstated if claim 7 is allowed because it depends from claim 7.

CONCLUSION

Applicant has addressed the Examiners issues concerning the specification, other pending applications, double patenting and inventorship. Additionally, the Gaines, Lokey and Friemann references fail to disclose all the limitations of claims 1-4, 7 and 9, and there is no teaching, suggestion, or motivation to combine those references as set forth in applicant's claims, so the obviousness rejection should be withdrawn. Applicant asserts that the pending claims are allowable and applicant requests that the application proceed to issuance. Please call the undersigned with any questions.

Respectfully submitted,

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Attachment 1

<u>Title</u>	<u>Serial No./ Publication No.</u>	<u>Filing Date/ Publication Date</u>
Detection System For Power Equipment	09/929,426 2002-0017176-A1	August 13, 2001 February 14, 2002
Contact Detection System For Power Equipment	60/225,200	August 14, 2000
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	09/929,221 2002-0017336-A1	August 13, 2001 February 14, 2002
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	60/225,211	August 14, 2000
Firing Subsystem For Use In A Fast-Acting Safety System	09/929,240 2002-0020263-A1	August 13, 2001 February 21, 2002
Firing Subsystem For Use In A Fast-Acting Safety System	60/225,056	August 14, 2000
Spring-Biased Brake Mechanism For Power Equipment	09/929,227 2002-0020271-A1	August 13, 2001 February 21, 2002
Spring-Biased Brake Mechanism For Power Equipment	60/225,170	August 14, 2000
Brake Mechanism For Power Equipment	09/929,241 2002-0017180-A1	August 13, 2001 February 14, 2002
Brake Mechanism For Power Equipment	60/225,169	August 14, 2000
Retraction System For Use In Power Equipment	09/929,242 2002-0017181-A1	August 13, 2001 February 14, 2002
Retraction System For Use In Power Equipment	60/225,089	August 14, 2000
Replaceable Brake Mechanism For Power Equipment	09/929,236 2002-0020261 A1	August 13, 2001 February 21, 2002
Replaceable Brake Mechanism For Power Equipment	60/225,201	August 14, 2000
Brake Positioning System	09/929,244 2002-0017182-A1	August 13, 2001 February 14, 2002
Brake Positioning System	60/225,212	August 14, 2000
Logic Control For Fast-Acting Safety System	09/929,237 2002-0020262-A1	August 13, 2001 February 21, 2002
Logic Control For Fast-Acting Safety System	60/225,059	August 14, 2000

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<u>Title</u>	<u>Serial No./ Publication No.</u>	<u>Filing Date/ Publication Date</u>
Motion Detecting System For Use In A Safety System For Power Equipment	09/929,234 2002-0017178-A1	August 13, 2001 February 14, 2002
Motion Detecting System For Use In A Safety System For Power Equipment	60/225,094	August 14, 2000
Translation Stop For Use In Power Equipment	09/929,425 2002-0017175-A1	August 13, 2001 February 14, 2002
Translation Stop For Use In Power Equipment	60/225,210	August 14, 2000
Translation Stop For Use In Power Equipment	60/233,459	September 18, 2000
Cutting Tool Safety System	09/929,226 2002-0017183-A1	August 13, 2001 February 14, 2002
Cutting Tool Safety System	60/225,206	August 14, 2000
Table Saw With Improved Safety System	09/929,235 2002-0017184-A1	August 13, 2001 February 14, 2002
Table Saw With Improved Safety System	60/225,058	August 14, 2000
Miter Saw With Improved Safety System	09/929,230 2002-0017179-A1	August 13, 2001 February 14, 2002
Miter Saw With Improved Safety System	60/225,057	August 14, 2000
Fast Acting Safety Stop	60/157,340	October 1, 1999
Safety Systems For Power Equipment	09/676,190	September 29, 2000
Fast-Acting Safety Stop (Taiwan)	143466	February 25, 2002
Fast-Acting Safety Stop	60/182,866	February 16, 2000
Safety Systems for Power Equipment (PCT)	PCT/US00/26812	September 29, 2000
Miter Saw With Improved Safety System	10/052,806 2002-0059855-A1	January 16, 2002 May 23, 2002
Miter Saw With Improved Safety System	60/270,942	February 22, 2001
Contact Detection System For Power Equipment	10/053,390 2002-0069734-A1	January 16, 2002 June 13, 2002
Contact Detection System For Power Equipment	60/270,011	February 20, 2001

<u>Title</u>	<u>Serial No./ Publication No.</u>	<u>Filing Date/ Publication Date</u>
Power Saw With Improved Safety System	10/052,273 2002-0059853-A1	January 16, 2002 May 23, 2002
Power Saw With Improved Safety System	60/270,941	February 22, 2001
Table Saw With Improved Safety System	10/052,705 2002-0056350-A1	January 16, 2002 May 16, 2002
Table Saw With Improved Safety System	60/273,177	March 2, 2001
Miter Saw With Improved Safety System	10/052,274 2002-0059854-A1	January 16, 2002 May 23, 2002
Miter Saw With Improved Safety System	60/273,178	March 2, 2001
Miter Saw With Improved Safety System	10/050,085 2002-0056349-A1	January 14, 2002 May 16, 2002
Miter Saw With Improved Safety System	60/273,902	March 6, 2001
Miter Saw With Improved Safety System	10/047,066 2002-0056348-A1	January 14, 2002 May 16, 2002
Miter Saw With Improved Safety System	60/275,594	March 13, 2001
Safety Systems For Power Equipment	60/275,595	March 13, 2001
Miter Saw With Improved Safety System	10/051,782 2002-0066346-A1	January 15, 2002 June 6, 2002
Miter Saw With Improved Safety System	60/279,313	March 27, 2001
Safety Systems for Power Equipment	10/100,211 2002-0170399-A1	March 13, 2002 November 21, 2002
Safety Systems For Power Equipment	60/275,583	March 13, 2001
Router With Improved Safety System	10/197,975 2003-0015253-A1	July 18, 2002 January 23, 2003
Router With Improved Safety System	60/306,202	July 18, 2001
Translation Stop For Use In Power Equipment	09/955,418 2002-0020265-A1	September 17, 2001 February 21, 2002
Translation Stop For Use In Power Equipment	60/292,081	May 17, 2001
Band Saw With Improved Safety System	10/146,527 2002-0170400-A1	May 15, 2002 November 21, 2002
Band Saw With Improved Safety System	60/292,100	May 17, 2001

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<u>Title</u>	<u>Serial No./ Publication No.</u>	<u>Filing Date/ Publication Date</u>
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	10/172,553 2002-0190581-A1	June 13, 2002 December 19, 2002
Apparatus And Method For Detecting Dangerous Conditions In Power Equipment	60/298,207	June 13, 2001
Discrete Proximity Detection System	10/189,031 2003-0002942-A1	July 2, 2002 January 2, 2003
Discrete Proximity Detection System	60/302,937	July 2, 2001
Actuators for Use in Fast-Acting Safety Systems	10/189,027 2003-0005588-A1	July 2, 2002 January 9, 2003
Actuators For Use In Fast-Acting Safety Systems	60/302,916	July 3, 2001
Actuators For Use In Fast-Acting Safety Systems	10/205,164 2003-0020336-A1	July 25, 2002 January 30, 2003
Actuators For Use In Fast Acting Safety Systems	60/307,756	July 25, 2001
Safety Systems for Power Equipment	10/216,020 2003-0037651	August 9, 2002 February 27, 2003
Safety Systems For Power Equipment	60/312,141	August 13, 2001
Safety Systems For Band Saws	10/202,928 2003-0019341-A1	July 25, 2002 January 30, 2003
Safety Systems For Band Saws	60/308,492	July 27, 2001
Router With Improved Safety System	10/251,576 2003-0056853-A1	September 20, 2002 March 27, 2003
Router With Improved Safety System	60/323,975	September 21, 2001
Logic Control With Test Mode For Fast-Acting Safety System	10/243,042 2003-0058121-A1	September 13, 2002 March 27, 2003
Logic Control With Test Mode For Fast-Acting Safety System	60/324,729	September 24, 2001
Detection System for Power Equipment	10/292,607 2003-0090224-A1	November 12, 2002 May 15, 2003
Detection System For Power Equipment	60/335,970	November 13, 2001

<u>Title</u>	<u>Serial No./ Publication No.</u>	<u>Filing Date/ Publication Date</u>
Apparatus and Method for Detecting Dangerous Conditions in Power Equipment	10/345,630 2003-0131703-A1	January 15, 2003 July 17, 2003
Safety Systems For Power Equipment	60/349,989	January 16, 2002
Brake Pawls for Power Equipment	10/341,260 2003-0140749-A1	January 13, 2003 July 31, 2003
Brake Pawls For Power Equipment	60/351,797	January 25, 2002
Miter Saw With Improved Safety System	10/643,296	August 18, 2003
Miter Saw With Improved Safety System	60/406,138	August 27, 2002
Retraction System And Motor Position For Use With Safety Systems For Power Equipment	60/452,159	March 5, 2003
Table Saws With Safety Systems And Blade Retraction	60/496,650	August 20, 2003
Brake Cartridges For Power Equipment	60/496,574	August 20, 2003
Switch Box For Power Tools With Safety Systems	60/533,598	December 31, 2003
Motion Detection System For Use In A Safety System for Power Equipment	60/496,568	August 20, 2003
Improved Detection Systems For Power Equipment	60/533,791	December 31, 2003
Improved Fence For Table Saws	60/533,852	December 31, 2003
Improved Table Saws With Safety Systems	60/533,811	December 31, 2003
Brake Cartridges And Mounting Systems For Brake Cartridges	60/533,575	December 31, 2003
Improved Table Saws With Safety Systems and Systems to Mount and Index Attachments	60/540,377	January 29, 2004

CERTIFICATE OF TRANSMISSION/MAILING

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Date: March 19, 2004
David A. Fanning

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